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The Role of Law Enforcement Officers in Drug Use Prevention within School Settings

A Guiding Document

Acknowledgments

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Note to the Reader

This guiding document primarily aims to improve the effectiveness of pre-existing and ongoing work of Law Enforcement Officers (LEO) involved in substance use prevention in schools. Its intentions are to incite LEO to re-assess their mode of operation and align their work with what the science of prevention suggests doing in such settings. It does not advocate for actual initiation of LEO in school-based prevention if they have not been already engaged or are planning to do so. Furthermore, this guiding document does not prescribe any specific process on how to deal with different scenarios in schools or advocate for any specific intervention to undertake by LEO in such school-based drug prevention. It rather provides an overview of the strategic thinking process that needs to be considered by frontline LEO (or their management) whenever implicated in such activities. By doing so, this guiding document inspires LEO to re-invent their role and open new opportunities for them in prevention. It also strives to better integrate LEO in the larger systems of prevention, bringing them closer to other prevention agents, and to optimize the effectiveness of this prevention system by capitalizing on the strength and weaknesses of each of its agents. The guiding document also encourages areas and modes of evaluation of LEO-led prevention interventions in school settings to foster the potential future availability of such evidence-based packages. The science of

prevention, the science of communication, and the science of policing guide this document's content. This guiding document defines these sciences, looks for an intersection between them, and raises the question as to how this intersection can best be put into practice.

While this guiding document focuses on enhancing the effectiveness of drug use prevention programmes in schools, the underlying scientific prevention principles it portrays in addressing vulnerabilities to support the healthy and safe growth of children makes it applicable for LEO preventing substance use both inside and outside school settings.

This guiding document utilizes the term “children” per the Convention on the Rights of the Child, which refers to all individuals below the age of eighteen years¹, representing most students in schools. However, when it comes to age-appropriate responses, the guiding document uses the age categories of the UNODC/WHO International Standards on Drug use Prevention (also referred to in this document as the “International Standards” for short) that refers to ages based on the transitional milestones of development of the child (infants, toddlers, early childhood, middle childhood, adolescence, etc.)².

1 United Nations Human Rights Office of the High Commissioner. Convention on the Rights of the Child [Internet]. 1989. Available from: [https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child#:~:text=PART I-,Article 1,child%2C majority is attained earlier](https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child#:~:text=PART%20I-,Article%201,child%2C%20majority%20is%20attained%20earlier)

2 United Nations Office on Drugs and Crime (UNODC). International Standards on Drug Use Prevention [Internet]. Vienna; 2020. Available from: <https://www.unodc.org/unodc/en/prevention/prevention-standards.html>

The Role of Law Enforcement Officers in Drug Use Prevention within School Settings

A Guiding Document

Chapter 1 – Introduction

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- *comprehend the link between school safety and child development,*
- *acknowledge the importance of prevention inside schools,*
- *understand the general comprehensive approach of the UNODC/WHO International Standards on Drug Use Prevention towards substance use prevention,*
- *grasp the modality of the Delphi method used in consolidating the input and expertise from different stakeholders into the development process of the guiding document.*

The link between safety and learning is clear: if schools are not safe, children will not be able to study in an optimal setting that is suitable for their development [1]. Crime, violence and disturbance of the school safety climate and their associated problems create a disadvantageous environment for student academic achievement. Students do better in school with safe and organized environments, just as safety is a foundation for other types of growth in society. The safety of school children is a continuing matter of concern for authorities and civil society organisations worldwide.

The main aim of the International Standards is to present evidence-based interventions for drug use prevention. The approach of the UNODC/WHO International Standards on Drug Use Prevention

is comprehensive, so that while the term “drug use” refers to the use of psychoactive substances outside the context of legitimate medical or scientific purposes, the International Standards actually support “substance use” prevention in general. The term “substance use” refers to the use of psychoactive drugs, regardless of whether they are controlled or not, and as such cover: tobacco, alcohol, inhalants, and new psychoactive substances in addition to substances under international control (“drugs”). The comprehensiveness of the International Standards expands beyond the definition of the particular substances, it addresses an overall vulnerability framework that is associated with the risk of using drugs as well as the risk for many other negative social and health consequences, hence its value in the context of discussion of safety.

1.1. Importance of prevention inside schools

Children are usually enrolled in schools at the middle childhood stage (aged 6 – 11 years). This is a period when children start spending less time with their families and more time with their peers and the larger community, primarily in the school setting. Therefore, the role and climate of the school and the quality of its surrounding physical environment start playing an influential role in the developmental path of children in this age group. The quality of this environment is affected by multiple factors such as the safety of the physical environment,

opportunities for support for healthy emotional, cognitive and social development, community norms, school culture, quality of education, and more. During middle childhood, the importance of social skills and pro-social attitudes develop and become critical protective factors that affect how well children cope with the school and bond with their peers. The quality and characteristics of the surrounding environment play a key role in shaping these skills and attitudes.

1.2. The value and process used in the development of this guiding document

In many countries LEO are actively involved in drug prevention in school settings. Nevertheless, a scoping review of the literature shows that there is no published evidence on the impact of the work that LEO perform regarding substance use prevention inside schools (full paper is under Appendix A) [2]. Still, there is an indication within the etiological model of vulnerability of the International Standards that LEO can be influential actors in their role of improving safety on several ecological layers around the child (directly on the safety of the child, or indirectly on the safety in or around the school, at the community level and more). Hence within the available science, this guidance document sought to explore means of capitalizing on the existing knowledge to further support the role LEO play in positively preventing substance use in schools.

Accordingly, a Delphi method was used to develop this guiding document by consolidating the experience and input from experts and practitioners in the field of prevention as well as law enforcement. The Delphi method is considered reliable when developing a new concept and strategic direction [3,4]. It allows for gathering feedback and information from a group of stakeholders and then drawing strength from the different experiences and range of expertise to inform a complete picture about the studied topic [5]. Additionally, the Delphi method encourages further explorations of the available packages designed for LEO, based on the available science. It does not necessarily advocate for actual engagement in prevention, as it is rather used to improve the ongoing work of LEO involved in substance use prevention in schools, and to re-assess their mode of operation and to move closer to what the science of prevention suggests. The Delphi process used is detailed in the full paper in Appendix A.

Points for reflection

1. *What are your responsibilities in school settings?*
2. *How do you implement the science of prevention in your work as a law enforcement officer? (e.g., Who within the school do you work with? Who do you report to within your law enforcement organization?)*
3. *What are your expectations regarding the use of the science of prevention in a school setting?*
4. *What topics should law enforcement agencies discuss, in meetings, in order to ensure continuous development of the strategies that are and are not working?*
5. *How can these meetings be facilitated in the most effective manner?*



Chapter 2 – Science of prevention (UNODC/WHO International Standards on Drug Use Prevention) – School based elements of prevention

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- understand in depth the vulnerability framework of the UNODC/WHO International Standards on Drug Use Prevention and how it is aligned with the science of prevention,
- be able to differentiate between the milestones of child development,
- gain perspective on the appropriate prevention responses according to each developmental age,
- understand the importance of bringing science into the culture of prevention, particularly in the context of law enforcement.

2.1. The UNODC/WHO International Standards on Drug Use Prevention

Since 2013, the UNODC has been engaging with member states to change the discourse around prevention within international policy, aligning it with the science of prevention through the International Standards.

Prevention science is critical for the proper implementation of current and ongoing regulatory and policy frameworks guiding global development responses. Historically, prevention has been mixed up with awareness raising campaigns. The International Standards explains that awareness is a small component of a larger prevention response [7].

In September 2015, 193 member states of the United Nations committed to working towards the implementation of 17 Sustainable Development Goals (SDGs) at national, regional, and international levels. This call to action was entitled “Transforming our World: The 2030 Agenda for Sustainable Development”. These 17 SDGs cover topics such as poverty, hunger, education, gender, economic growth, and peace. These goals are interconnected and described through 169 targets. The SDG 3 on Health and Well-being carries a specific target, target 3.5, to “strengthen the prevention and treatment of substance use, including narcotic drug use and harmful use of alcohol”; which further describes the value of science-based prevention as a component of development. Such a target further reflects the value and importance of evidence-based prevention in supporting Sustainable Development on the road to 2030.

This message of strengthening science-based evidence to assist in drug prevention has also been a message promoted in the 2019 Ministerial Declaration on Strengthening Our Actions at the National, Regional and International Levels. It is intended to accelerate the Implementation of Our Joint Commitment to Address and Counter the World Drug Problem as an outcome of the meeting of the Commission on Narcotic Drugs in 2019.

The application of such evidence-based prevention requires an appropriate “culture of prevention”. The Society for Prevention Research (SPR) states that prevention science addresses: 1) the identification of risk and protective factors, 2) the analysis of interventions determined to be effective and preventive in addressing the risk factors, and 3) the identification of optimal means to disseminate these interventions. While there is a wealth of evidence for many interventions that are proven to be effective, there is also a significant lack of evidence for other interventions that are in use [7]. To support the translation and adoption of prevention science in the field of drug prevention, the UNODC — in collaboration with the WHO — developed the International Standards as a key normative document for operations [7].

The International Standards, initially launched in 2013 [8] and updated in 2018 [7], summarise the available evidence on what constitutes an effective prevention response and describe the different types of evidence-supported prevention approaches [9].

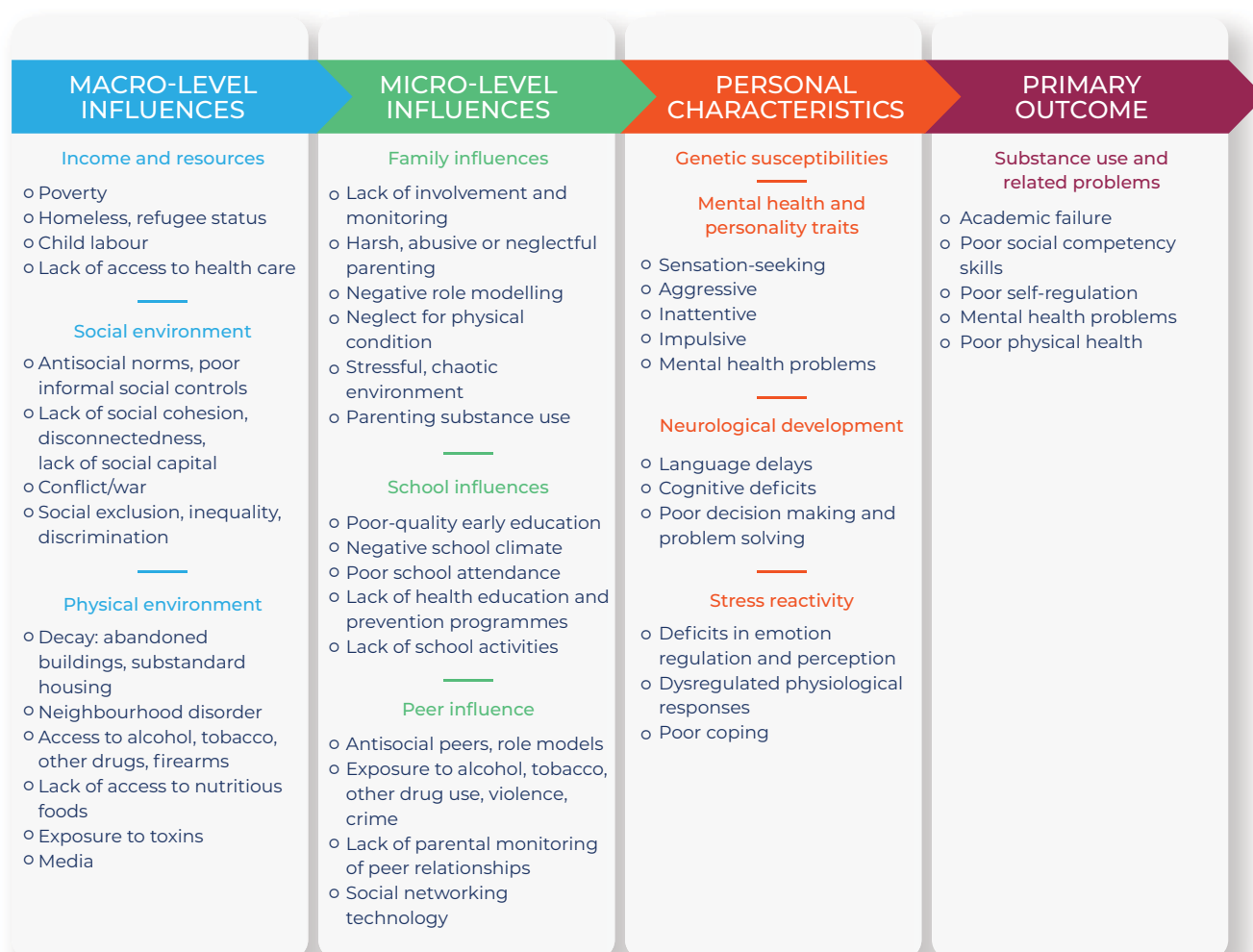
The International Standards call for a paradigm shift in the vulnerability framework addressed in the prevention responses. The shift moves the focus of prevention toward the development of the individual and an understanding of the complex interactions among the numerous factors that potentially contribute to a higher risk of substance use, referred to as vulnerability factors (Figure 1). This includes a diversity of groups and levels of community interventions.

The International Standards are grounded in the perspective that places the focus on the healthy development of individuals across the life span. A perspective that states that it is essential to remove the focus from the psychoactive substance as the core object and rather address human beings and their healthy development. In this model, the initiation of drug use at a young age is attributed to the interactions between unaddressed vulnerabilities at the individual level with the macro-

and micro-environment surrounding the individual (Figure 1). This approach refutes the notion that the initiation of drug use is the simple result of “bad” personal free choice. Moreover, it delineates that drug prevention through awareness-raising or fear-raising messaging is not enough (and is sometimes counterproductive). Prevention interventions should focus on assisting individuals in meeting developmental milestones and helping them grow safely and healthily [10].

It is the interaction between the individual, their personal characteristics, their micro-level environment (family, school, peers), and the macro-level environment (income and resources and social and physical environment) that define the level of risk or protection. If the interaction has a negative effect, it is a vulnerability factor; if the interaction has a positive and supportive effect, it is a protective factor.

Figure 1. Vulnerability matrix



Research has identified these environmental influences as key in determining ultimate behavioural outcomes. They do not act alone, however; they interact with personal characteristics to alter pathways to substance use and harmful use. Thus, it is important that prevention strategies take into account these complex interactions to identify relevant targets for programmes and policies in any given individual, community or population.

Personal characteristics

Personal characteristics are individual characteristics that define the person and are multi-dimensional covering several key features that are important from a vulnerability perspective. These include:

Genetic susceptibilities

Genetic variants that confer risk are like switches, which means they are either “on” or “off”. Their position is largely predetermined. For every genetic switch that is “on”, there may be some incremental increase in risk. Environmental factors are like dials, which can be turned up or down depending on experience. As adversity dials are ramped up, risk is increased. The threshold can be reached by any number of combinations of these factors, unique for each individual. The functional relationship between factors is also complex and not necessarily additive, e.g., some genetic risk variants may require specific environmental influences to increase liability (i.e., via epigenetics). Similarly, the relationship between factors can be synergistic or even antagonistic. Finally, there are environmental dials that confer resiliency and may counteract or reduce the effect of genetic switches that are on.

Mental health and personality traits

These include both internalizing (e.g., post-traumatic stress disorders (PTSD), depression, and anxiety disorders) and externalizing (e.g., Conduct Disorder (CD), Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Antisocial Personality Disorder (ASPD)) mental health disorders. These have consistently been strongly associated with substance use risk. The correlation is bidirectional, with individuals with these disorders being more prone to engaging in substance use at a younger age than those not having them. Adults and adolescents are also at increased risk for ongoing drug use to alleviate psychiatric symptoms and treatment resistance. The existence of these vulnerabilities may increase issues with stress reactivity and exhibit a distinct influence on the developmental pathways leading to substance use. For example, persons with internalizing illnesses tend to have greater levels of arousal in brain regions involved in stress reactions, which may lead to a propensity to self-medicate the anxiety and despair that this process causes. Low arousal levels in these systems have been connected with a relative disregard for consequences and a demand for more stimulation in individuals with externalizing disorders. Daily social obstacles may ultimately elicit stress reactions in persons with mental health problems: when a growing number of activities become difficult to master and/or induce worry and a decline in self-efficacy, sensitivity to trivial occurrences can increase. In

addition, the chance of successfully fulfilling social task demands is lowered in these individuals since doing so requires intact neuro-cognitive and affective skills, which are often impaired in those with mental disorders. Consistent evidence has also linked a challenging temperament and certain personality traits to an elevated risk for substance use. Individuals with a high level of impulsivity, aggressiveness, sensation- or novelty-seeking, negative affect, impaired judgment, high activity levels, risk-taking tendencies, a lack of regard for negative consequences, a lack of pain avoidance responses, and abnormal levels of arousal in response to stress are at a high risk for substance abuse. While symptoms vary according to age and degree of maturity, these characteristics tend to endure throughout childhood and adolescence. Normal adolescence is marked by increased reward anticipation, sensitivity, and novelty- or sensation-seeking—especially for social rewards—which is of major relevance in terms of prevention (e.g., peer regard, gains in social status). It follows that adolescence is the most typical time for drug use to begin, and teenagers who demonstrate an unusually high level of any combination of the aforementioned characteristics (compared to the overall adolescent population) are at increased risk. Although temperament and personality are believed to be generally stable, their expression may be modified or redirected by several psychosocial approaches to reduce the risk of substance use. Consequently, preventive initiatives must be designed to alter this developmental trajectory. Prevention methods will be most successful if they target these underlying characteristics in combination with specific environmental supports based on the needs of the targeted people, their families, and their communities.

Neurological development

Numerous studies demonstrate that interactions between specific brain features and environmental variables have the capacity to impact the development of a series of behaviours that predispose a person to drug dependence [11]. These neurological impairments are believed to underlie behaviours that often precede drug dependence. There is substantial evidence that deficits and delays in executive cognitive functions and the inability to accurately perceive emotions during childhood and adolescence are associated with the early onset of conduct problems [12,13] and delinquency [13,14]. And even in younger children, impairments or delays in the executive cognitive functions and emotional regulation building blocks have been frequently linked to these behaviours [15]. These neurological disadvantages are exacerbated by adverse environmental factors, such as stress, adversity, abuse, poor nutrition, and other unfavourable events that limit brain development and may cause quantifiable harm to these functions.

Poor self-regulation of behaviour as a result of these deficits and delays varies with developmental stages. For young children, it may manifest as poor school readiness and delayed academic achievement, aggression, conduct problems, negative affect, insensitivity to consequences, sensation-seeking, impulsivity, and poor decision making and problem-solving skills. Over time, these behaviours raise the likelihood of early drug use and conduct disorder in adolescence, as well as the likelihood of substance use and addiction in young adulthood. Revitalizing disadvantaged neighbourhoods, assisting families, and tailoring evidence-based interventions for children have long-lasting favourable benefits on brain development and function, which are likely to prevent harmful behaviours such as substance use.

Stress reactivity

Different people have different ways of reacting to stress (and to repetitive stress). Repetitive exposure to stresses, such as poverty, child abuse, or divorce, profoundly impairs the development of brain systems that underpin social, behavioural, cognitive, and emotional functioning. Stress exposures may further affect hormonal systems (e.g., cortisol) that govern these processes; persistently high-stress hormone levels can impair learning, memory, decision-making, and other abilities that typically promote self-regulation of behaviour [16]. The physiological and behavioural stress reactions engage the brain mechanisms underpinning the positive reinforcing effect of drugs [17], hence, possibly encouraging drug-taking behaviours. As a consequence, when a person suffers a considerable quantity of stress or adversity, these neurologically based systems are impaired, resulting in poor behavioural and physiological stress tolerance. Such deficits have been proven to enhance drug-seeking behaviour. Thus, substance abuse may be a maladaptive behavioural and physiological reaction to stressful events. The level to which stress is experienced influences the life course trajectories of persons who start using drugs, and it can even intensify drug use. According to several studies, a rise in marijuana, alcohol, and cigarette use is preceded by high levels of stress, inadequate social support, and avoidance of coping strategies. Notably, girls tend to suffer not just a higher number of unpleasant life experiences throughout adolescence than boys, but also to be more susceptible to interpersonal pressures and their negative effects. For instance, PTSD often precedes drug usage in girls, but it happens more frequently after drug use in boys, indicating that girls may self-medicate their symptoms, whilst males may be more prone to encounter trauma owing to the risk circumstances linked with drug addiction. When exposed to the pressures of familial violence and alcoholism, girls are also at a greater risk for drug dependence [18]. Therefore, gender

differences should be considered when identifying variables that lead to drug usage and developing preventive and treatment strategies.

According to theories of addiction, the desire to enhance mood following exposure to acute and chronic stresses plays a crucial role in drug use and relapse. Increased sensitivity to consequences or an adaptive coping style may give protection from a negative result, hence avoiding the onset or progression of drug use. In contrast, stress exposures may be more strongly connected to substance use in the context of mental health, poor parenting, family dysfunction, and unfavourable neighbourhood features.

Micro-level influences

Regardless of individual vulnerability, micro-environments surrounding the individual play a key role in amplifying or attenuating such a vulnerability. The main micro-level influences are presented below:

Family influences

The family environment has the greatest impact on early child development across various domains of functioning [7], and the impacts of poor parenting can be long-lasting. It is essential to intervene when poor parenting poses a threat to the development of a child. The positive ways in which parents engage with their children may have a significant influence on the development of their children. The social and emotional regulation abilities of children are heavily influenced by parenting skills and can in turn amplify resilience to substance use and other negative behaviours. Parenting and family remain crucial throughout adolescence when adolescents demand more autonomy and have more possibilities to engage in harmful behaviours. It is essential that prevention efforts focus on parenting techniques that promote healthy development, such as appropriate discipline practices, warmth, affection, positive attention, secure attachment, involvement, limit setting, supervision and monitoring, and positive reinforcement for acceptable behaviour. In contrast, parental behaviours that are harsh, restricted, emotionally provoked, inconsistent, unfriendly, and/or high in conflict can often lead to negative behavioural outcomes in their children. Abuse, neglect, and domestic violence, in particular, pose a risk to every aspect of the development of a child. Children exposed to high rates of these types of stress and conflict exhibit higher rates of behavioural and emotional maladjustment, particularly aggression, than children in families experiencing lower levels of conflict; they are two to four times more likely to have high levels of mental and physical health problems compared to national norms. Exposure

to aggression has been connected to a variety of adolescent issues, including delinquency, early initiation and escalation of drug use, and hazardous sexual behaviours, especially among males. On the other hand, despite being generally less aggressive, girls tend to be more sensitive to family-centred and relational problems, which may increase their susceptibility to stress and mental health issues and contribute to the early onset of substance abuse and other risky behaviours. Additionally, structural and functional qualities of the family (e.g., cohesiveness, supportiveness, and communication) have an equal impact on the development of resilience abilities in children. In order to avoid negative consequences (e.g., substance use) in children exposed to these settings, training in parent skills, easing the pressures and mental health issues that poorly-skilled caregivers often display, and trauma prevention and treatment measures are often necessary [19].

School influences

School attendance protects against a variety of negative effects on numerous levels. Not every country has enough schools, and not all parents can afford to send their children to school. Policies designed to guarantee that all children are able to attend school may have a preventive impact; this is especially true for children with self-control issues. Effective schools may guarantee that the majority of young people acquire the cognitive, social, and emotional control abilities necessary for success in life and the avoidance of risky behaviours. Significant socializing factors that influence student learning and behaviour include the quality of the environment of the school, the instructors, the curriculum, and the social networks among the students. Academic failure prevents young people from achieving success in a range of social arenas throughout childhood and adulthood. Inadequate education results in poorer levels of cognitive functioning, poor social skills, high levels of stress, and attitudes of inadequacy and failure, all of which are related to an increased risk for substance use and other negative health effects. Finally, inadequate education leads to an inability to compete in the workforce and acquire well-paying, meaningful employment, which is also related to substance use.

On another level, a lack of school-based assistance for children/adolescents with cognitive difficulties and mental health issues often hinders disadvantaged or special needs children from receiving the necessary attention to overcome their obstacles. Learning difficulties and mental health issues raise substance use risk in the absence of proper educational assistance and/or tailored school programmes. In addition to teaching kids the academic and social skills they need to thrive in school and in life, schools must also address social and emotional issues that might interfere with learning and classroom

management. The absence of participation by parents in the education of their children is also a risk for substance use; the involvement of the parents is essential for the acquisition of knowledge by the students, including their ability to regulate their behaviour and emotions. On the other hand, the attachment of a child to school is a component of resilience, which suggests that effective and responsive teachers, an evidence-based curriculum, classroom reinforcements, a positive school culture, opportunities for school participation, and the maintenance of school building structures may play an important role in the prevention of substance use.

Peer influences

As children go through primary school, peer interactions have an increasing influence on the development of social skill sets, attitudes, exposures to new experiences, and learning “normative” behaviours from their peer groups. Exposure to violence, drug use, and criminality, for instance, may be an extension of peer influence. The peer environment has a particularly significant role in the early teenage development of social skills, which is additional to the impact of caregivers, but which may supplant parental influences on adolescent behaviour. This impact is amplified when most of their time with peers is spent together in unstructured settings, such as the street or a park. Similarly, the use of social networking technologies deprives the family and parents of opportunities to influence the lives of their children and adolescents via direct contacts. On websites and via social networking venues, detailed messages that promote substance use are often sent, and access to these sites has been linked to alcohol and other drug usage. Conversely, parental monitoring standards and healthy family ties can prevent negative peer impacts that occur directly or via social networks, including the propensity to engage in substance use. Parents’ use of rules to supervise teenagers’ activities and encouragement of healthy outside-the-home activities are crucial to limiting peer influence. Adolescence is a stage of development marked by significant changes, including an increased focus on social relationships, autonomy, and dangerous circumstances and behaviours. It is also a period of formation of linkages between neuronal systems responsible for goal setting, impulse control, emotional regulation, and decision making that continues through the middle to late twenties. The presence of bad influences from peers hinders these cognitive processes. Thus, even from a normative viewpoint, adolescence is a time of increased sensitivity to dangerous behaviours. On the other hand, this accelerated time of development presents a rare window of opportunity to intervene successfully and have a lasting good influence on future behaviours and achievements. Interventions targeting peer relationships no later

than early adolescence could greatly lower the likelihood of drug use initiation and progression throughout this time of life. There is emerging evidence that girls may be impacted differently by their classmates than boys. For instance, if their social network of friends and partners includes drug users or exposes them to drugs or alcohol, they are more likely to begin using those substances. In addition, worries about peer approbation, sadness, and body image, which are all connected, contribute to girls' vulnerability to drug use. The early beginning of puberty in females influences their susceptibility for substance use and other dangerous behaviours. Girls may get drawn to the status of older, deviant boys, and early maturing girls are more likely to date at earlier ages and to associate with older male peers who are prone to risk-taking activities and who would engage these girls in their poor social behaviour. Additionally, the start of puberty is related with increasing conflict between parents and adolescents over topics such as dating, friend selection, and changed behavioural expectations [20]. Moreover, living in a poor neighbourhood exacerbates the influence of peers for both sexes [21]. These environmental distinctions may result in diverse modelling, exposure, and reward of dangerous behaviours. Thus, contextual factors such as school, parenting, and neighbourhood setting may amplify the relationships between pubertal timing, peer influences, and parental and family involvement.

Macro-Level Influences

The macro-level influences include the general environments, such as the social and cultural environment, poverty, and physical environment that an individual is in. The social environment of the larger community influences beliefs, attitudes and behaviours through: i) shaping social norms; ii) influencing beliefs about the risks and consequences of using psychoactive substances, and iii) affecting stress response. Personal vulnerabilities are either directly affected by larger macro-level influences or indirectly by affecting the functioning of the micro-level structure around the individual. The main macro-level influences considered are:

Income and resources

Poor neighbourhoods with many single-parent families, racial segregation, inequality (based on race, sex, or other characteristics), homelessness, transiency, and poorly equipped schools and teachers have high rates of child abuse, infant mortality, school dropout, academic failure, crime, delinquency, mental illness, and substance use. In the last 30 years, a vast body of information has helped us understand how poverty affects child and adolescent development. Poverty in a society has an impact on the environment, as well

as the options and resources available to parents for the benefit of their children. It stresses social infrastructure, leading to more arguments, negative consequences on parents' and kids' health, and less collaboration among locals and community groups. Consequently, it is more challenging and less successful to teach children the social skills they will need to engage effectively with their classmates and adults. As a result, children from low-income families are more likely to become impoverished adults who pass on their difficulties to their own children.

The influence of poverty on families and parenting can harm child development in three ways: i) by increasing stress among parents or caregivers, ii) by reducing the ability of the family to invest in learning and educational opportunities, and iii) by compromising their ability to behave as patient, responsive, and nurturing parents throughout development, largely due to stress, the need to work longer hours/more jobs, and other external factors resulting from the increased demands of providing for a family in an impoverished situation.

Several studies have linked economic hardship with challenges in parenting and the stress experienced by parents to the substance use of their children [22]. These impacts can be attributed, in part, to the failure of parents who are worried about meeting the fundamental and emotional requirements of their children, as well as the abuse and neglect of their children. The caregiving environments of children from low-income backgrounds are often unorganized and lack proper stimulation and support, producing stressful situations [23]. Children who are from disadvantaged backgrounds often don't have effective ways to deal with problems, which increases stress. In an impoverished, high-risk environment, stress impedes growth, leads to dysregulated physiological responses to stressful situations, increases risk for psychological disorders (e.g., depression, anxiety, traumatic stress disorders), and compromises self-regulatory skills, which are key vulnerability factors in risky behaviours such as substance use and delinquency. Childcare and educational programmes in poor neighbourhoods lack rich learning opportunities, further exacerbating the issue. Children in disadvantaged families and communities have limited access to health care, further increasing their risk of mental and physical illness. Poor neighbourhoods are often also the areas with the highest levels of drug traffic, increasing the opportunities for children to be exposed to drug use. Drug trafficking can also be a dangerous but attractive option for making money for adolescents in economically deprived areas. The impact of poverty on child development, particularly for girls, can be moderated through high-quality caregiving [24].

Children who are homeless, street-involved, or forced to work at a young age often have a history of severe adversity, such as maltreatment, caregivers with substance use and mental illness, instability and transiency, malnourishment, sexual assault, violence (experienced and witnessed), and, for some, kidnapping and coercion [25]. In all such situations, environmental conditions are very unfavourable, including failure to satisfy basic physical demands, hazardous exposure, lack of opportunities to study, lack of social bonds, lack of awareness of social norms, and stress. These adolescents have a high frequency of behavioural and psychiatric disorders, including substance use, suicide attempts, and PTSD [26]. In each case, there aren't enough resources or support (beginning with evaluations to identify requirements) to help children [27]. With more resources and political and health care participation, these youngsters may build skills that will enhance their prospects of success in school and life [28]. Thus, more effort needs to be done to alleviate poverty and protect against its negative effects on the growth and development of children, especially in terms of acquiring the knowledge and abilities essential to breaking free of poverty and achieving lasting success in their adulthood. While it is essential to further adopt programmes to reduce the causes of poverty, evidence-based prevention programmes that are easy to deliver in such contexts can reduce the effect of the environment on the safety and healthy development of children [29,30].

Social environment

The social environment of a neighbourhood has a significant effect on the risk of substance use because it influences social norms, enforces patterns of social control, affects how people perceive the risk of drug use, and changes how they respond to stress [31]. Laws, and how well they are enforced, help neighbourhoods, but informal social controls and norms are even more important for keeping neighbourhoods safe, especially when it comes to things like violence, child abuse, using illegal drugs in public, and other risky behaviours. Decades of research have shown that the risk of drug use is linked to how common drug use is in neighbourhoods, schools, families, and especially among peers during adolescence [32]. In a similar way, how kids and teens assess the risk of drug use, which comes mostly from their neighbourhood, friends, and family, affects whether or not they will take part. People are less likely to use drugs if they think they will hurt their bodies or minds or get themselves into trouble. For instance, a large survey done in the United States by the Center on Addiction and Substance Abuse (CASA) found that about half of the high school students in the study thought that using drugs was very dangerous. However, teens who viewed substance use as having positive effects (like being cool, controlling weight, self-medicating,

relieving stress, or coping) were more likely to smoke, drink, and use other drugs than those who saw it as having negative effects or who were more worried about the risks [33].

Social cohesion is a sign of attachment to, and satisfaction with, the neighbourhood and its people. It also means that people in a community trust and help each other, which is critical for neighbourhoods that want to raise children well. People in neighbourhoods that are socially cohesive can count on each other for help when they need it, keep the rules for good social behaviour and communication in the neighbourhood, help each other guide children and teens, and work together to solve problems. Researchers have found that strong social cohesion has a positive effect on all-cause mortality [34], mental health [35], physical activity [36], and self-rated health [34,35,37]. High social cohesion has also been linked to fewer teens using drugs [38], fewer teens thinking they have drug problems, and fewer deaths caused by drugs [38]. Thus, social cohesion can be seen as a protective factor.

In turn, people who live in these poor neighbourhoods tend to have lower levels of physical and mental health, education, and employment, and they are more likely to engage in behaviours, such as drug use, than people who live in wealthier neighbourhoods. Even though governments work hard to reduce inequality, some racial, ethnic, income, and gender groups continue to be treated differently and have less access to the goods and services in their society. Researchers have determined that discrimination is both a social process that affects groups and a social act that affects each member of a group. Discrimination and social exclusion have effects on the development of a child, considering both structural and cultural perspectives. Structural inequalities lead to poor results in education, health, and behaviour. This is mostly because people have different access to material needs, like good food, housing, and schools, and because they are more likely to be exposed to environmental toxins and dangers. People who are immigrants tend to have more trouble with these issues. Cumulative adversity in immigrants, such as language and legal status barriers [39], perceived discrimination [40], and acculturation problems, have all been linked to a higher risk for substance abuse and mental health problems. These problems are made worse by poor access to services and social supports and a lack of effective neighbourhood collectivism. Even more worrying are the impacts of war and political instability on child development either directly or indirectly through all the social structures (including the family) around the child. The stress and unhealthy environments and experiences associated with these atrocities impede healthy child development, resulting in deficits and

delays in numerous functional domains, as well as high rates of psychological disorders, especially PTSD, and eventual substance use and addiction.

Physical environment

Many features of the local physical environment might hinder the growth of young individuals [41,42]. The physical layout of the neighbourhood has an impact on social interactions, crime, and drug use. Drugs, crime, violence, and accidents are also related to abandoned and dilapidated structures, easy access to alcohol and drugs, urbanization, and impoverishment in the neighbourhood. Neighbourhood quality is also connected with the presence of fast-food outlets, which promote a diet generally devoid of necessary nutrients, and physical pollutants (e.g., lead, cadmium), which directly impact nutrition, health, and, in turn, one's mental state. The idea of neighbourhood disorder refers to an area marked by vandalism, graffiti, and noise. There is a negative relationship between neighbourhood disturbance and physical functioning and self-reported health. Recent research has indicated that a poor neighbourhood setting is especially impactful on low-income urban kids and results in increased exposure to drug activity, disorder, and violence, all of which may encourage drug use [43].

Furthermore, exposure to certain toxins during prenatal development and early childhood has been strongly and consistently linked to

functional deficits (e.g., cognitive dysfunction and psychological disorders) [44], which have been linked to an increased risk for substance abuse and other types of psychopathology. Lead, cadmium, mercury, manganese, arsenic, and other heavy metals have well-established neurological effects. Particularly, even somewhat increased levels of lead exposure have been demonstrated to cause mental impairment. However, exposure in lower amounts has also been linked to hyperactivity and aggression in youngsters. Exposures are more firmly associated with personal traits (e.g., mental illnesses, cognitive deficiencies, etc.) that are known to raise the risk for drug use. Still, more work needs to be done in this area.

Lastly, the media has a large influence on drug-supportive societal norms and other messaging. Teenagers spend more time being amused by television, radio, movies, the internet, publications, and smartphones than they do with their families or even their friends. Essentially, these signals may make substance usage seem to be an acceptable behaviour and shift perceptions about the dangers of drug use. Thus, social media usage has been regularly connected to drug use. It is also feasible to acquire narcotics through the Internet and mobile phones while retaining a level of anonymity. Adults and teenagers are swayed by messages suggesting that drug usage would improve mood, stress management, and performance.

Summary of the main messages of the UNODC/WHO International Standards on Drug Use Prevention:



- Prevention is a science.
- Initiation at a young age is not the result of a free and independent choice.
- The “just say no” strategy is not enough.
- The focus of evidence-based prevention is on developing the individual, and not on the drug.
- Prevention is beyond awareness raising or fear arousal.
- Prevention helps personal growth at each developmental age: intellectual, language, cognitive-emotional, and social competency skills.
- Personal risk factors for substance use include: genetic susceptibilities, mental health and personality traits, neurological development, stress reactivity.
- Micro-level risk factors for substance use include: family, school, and peer influences.
- Macro-level risk factors for substance use include: income and resources, social environment, physical environment.

Figure 2. Summary of the strategies of interventions at the different levels and age groups

	Prenatal & Infancy	Early Childhood	Middle Childhood	Early Adolescence	Adolescence	Adulthood
Family	<ul style="list-style-type: none"> Prenatal & infancy visitation Interventions for pregnant women 		Parenting Skills			
School		Early childhood education	<ul style="list-style-type: none"> Personal & social skills and education Classroom management Policies to keep children in school 	Prevention education based on social competence and influence	Addressing individual vulnerabilities	
Community				School-wide programmes to enhance school attachment	School policies on substance use	
				Alcohol & tobacco policies		
				Community-based multi-component initiatives		
				Media campaigns		
				Mentoring		
					Prevention programmes in entertainment venues	
Workplace					Workplace prevention programmes	
Health Sector	Interventions for pregnant women		Addressing mental health disorders			
				Brief intervention		

Source: UNODC/WHO International Standards on Drug Use Prevention, 2nd Updated Edition

2.2. Milestones of development during school years

Given this etiologic framework, i.e., the relationship between the individual and his/her micro- and macro-level environments, evidence-based strategies can be organized by age group from prenatal /infancy into childhood, adolescence and then through to adulthood. The developmental needs of each group can be organised by the setting where the intervention is delivered: family, school, community, workplace, and the health sector (Figure 2).

Early childhood

Throughout the formative early childhood years, a child needs a caring and attentive environment. This stage goes up to the age just preceding formal school years. During this stage, the brain of a child begins to develop its reaction to different situations.

The growth stage of a child, including physical, emotional, cognitive, and social development, is of utmost importance. Parents or caregivers of children can receive help from nurseries and care centres for the overall development of their children [7]. The dimensions of early childhood development are numerous. During this stage of development, selective interventions, particularly those that are embedded in the early educational settings to better prepare children for their school years, are essential. These packages are effective when carrying the following characteristics: i) they develop the cognitive abilities as well as the social and linguistic skills of children; ii) they take place on a daily basis in separate sessions; iii) they are presented by instructors who have received training; iv) they provide assistance to families in regard to a variety of different socioeconomic concerns [7].

Middle childhood

During middle childhood, more and more time is spent away from home and the family, usually at school and with peers of the same age. The family unit continues to play a crucial role in the development and education of children. There is, however, a progressive growth of the significance of day care, education, and social networks. Safe and healthy emotional, cognitive, and social development is increasingly dependent on factors like community norms, school culture, and quality of education. When a child reaches school age, their social skills and pro-social attitudes become important protective factors that shape how well they do academically and how well they form friendships with their peers. Learning reading and arithmetic skills at an appropriate level, as well as learning how to manage impulses and emotions, are crucial developmental goals for children in the middle years of childhood. In addition, around this age, children start learning how to set and achieve goals, as well as how to solve problems. Development of a healthy connection to school, cooperative play with peers, adaptive learning, and self-regulation may be impeded by mental problems that emerge around this time (such as anxiety disorders, attention deficit hyperactivity disorder, and conduct disorders). At this age, children from disrupted households are more likely to associate with friends who engage in risky behaviours [7]. Strategies found to be effective for drug prevention during middle childhood are listed below.

For families: parenting skills

Parenting skills programmes aid parents to foster a nurturing child-rearing environment. This includes developing age-appropriate parental rules for acceptable behaviours, closely monitoring free time and friendship patterns, assisting with the acquisition of personal and social skills, and acting as role models. Such packages are organized in a way that makes it easy and appealing for both caregivers and their children. They consist of a series of sessions, include activities for the caregivers, the children and the whole family and are delivered through trained facilitators. They are designed not to undermine the parents' authority or to lecture but to provide information to parents about drugs, and they also do not exclusively focus on the child but on the caregiver as well. Evidence-based parental skills training is usually provided by a trained facilitator through a series of sessions. The best outcomes are found to be associated with i) strengthening family ties, or the link between parents and children, ii) supporting parents by demonstrating how to have a more active role in the lives of their children, such as monitoring their activities and friendships and being engaged in their education and learning, iii) demonstrating how to use constructive and developmentally

appropriate discipline, iv) demonstrating to parents how to serve as a role model for their children, and v) making participation simple and desirable for parents (e.g., flexible scheduling, lunches, child care, transportation, a modest award for finishing the sessions) [7]. The evidence shows that the training of parents can have poor outcomes when i) they undermine parents' authority; ii) they only provide information about drugs to parents, with parents discussing it with their children, and iii) when the training is conducted by poorly trained staff.

In schools: personal and social skills education

Skilled trainers can engage children in interactive activities to develop their personal and social skills. These programmes are usually offered in scheduled sessions to all pupils (i.e., this is a universal intervention). The programmes teach safe and healthy ways to handle everyday challenges, promote social and mental health, and emphasize development. In most cultures, children this age have not started using substances. The evidence shows that personal and social skills education programmes are more effective when delivered through a series of structured interactive sessions, often by providing booster sessions over a number of years, and when delivered by trained teachers or facilitators. The evidence also shows personal and social skills education are associated with negative outcomes when i) the main method of provision is non-interactive, e.g., lecturing, ii) information is provided on specific substances, including fear arousal, and iii) the focus is only on building self-esteem and on emotional education.

In schools: classroom environment improvement programmes

Classroom environment development programmes boost instructors' classroom management skills and help students socialize while reducing early aggressive and disruptive behaviours. Teachers are assisted by a set of non-instructional classroom methods to educate pro-social behaviour and prevent and reduce improper behaviour. These programmes promote academics and Social and Educational Learning (SEL). They are general and developmental, targeting the entire class.

The evidence shows classroom environment improvement programmes are associated with positive outcomes when i) delivered during the early school years; ii) they include strategies to respond to inappropriate behaviour, iii) they include strategies to acknowledge appropriate behaviour, iv) they include feedback on expectations, and v) they have the active engagement of students.

In schools: policies to retain children in school

School attendance and attachment, and the achievement of age-appropriate language and numeracy skills are protective factors against

drug use in this age group. Such policies may also include building new schools, providing nutrition in schools, and providing economic incentives for families to send children to school to encourage higher attendance and retention of children in schools. It is valuable to note that conditional financial incentive modalities to support sending children to school are also recommended by the World Health Organization as strategies to prevent later youth violence.

Adolescence

Adolescents are exposed to new ideas and behaviours via more significant interaction with individuals and organizations. Adolescent brain "plasticity" implies that, like infancy, interventions may reinforce or change prior experiences. The desire of young adolescents to assume adult roles and seek more independence can lead to poorly thought-out decisions and involvement in potentially harmful behaviours, such as risky sexual behaviours, smoking, drinking, risky driving, and substance use. Peer substance use (or other potentially harmful behaviours) and peer rejection impact behaviour, although parents also remain vital. Healthy attitudes and societal norms around drug use are also protective. Good social skills and mental and emotional health are protective in adolescence. Strategies found to be effective for drug prevention during adolescence are listed below.

For families: parenting skills

Parenting skills remain valuable especially during early adolescence, with a different set of age-appropriate caregiving skills at play. The characteristics of what works and does not work in the delivery mode of these parenting skills package remain, nevertheless, similar to what was described in middle childhood.

In school: prevention based on social and personal skills training

Skill-based preventive programmes involve pupils in engaging interactive activities to educate their personal and social skills (social competence) - such skills are tailored for the age group of reference. These programmes concentrate on cultivating substance and peer refusal skills to help young people resist social coercions and influences to take drugs and deal with hard life circumstances. They also allow age-appropriate discussions of social norms, attitudes, positive and negative expectations, and drug use repercussions. They try to shift normative ideas about drug use by tackling peer predominance and societal acceptability (social influence).

The evidence shows prevention based on social competence and influence is associated with

a positive outcome in early adolescence when i) interactive methods are used, ii) the training is delivered through a number of structured sessions, iii) training is delivered by trained facilitators, iv) the education focuses on changing the perception of the risks associated with substance use, with an emphasis on the immediate consequences, and v) the training dispels misconceptions regarding the normative nature and the expectations linked to substance use.

The evidence shows prevention based on social competence and influence to be associated with a negative outcome when i) non-interactive methods are used, including lecturing as the main delivery method, ii) the facilitators rely mainly on providing information, in particular to trigger fear arousal, iii) the training is delivered via unstructured dialogue sessions, iv) the focus is mainly on the building of self-esteem and emotional education, v) the discussions are only ethical and moral decision-making or values-based, and vi) the training utilises ex-drug users to share the testimony of their personal experiences.

In school: school policies on substance use

Schools establish policies and expectations for management, staff and student behaviour while on school premises with regards to substance use. These policies should be clear, transparent and avail a non-punitive mechanism to address incidents of use, turning it into an educational and health-promoting opportunity. While the policies applied should be universal, such interventions and policies may also include an indicated component of screening, brief interventions, and referral. They are commonly used alongside other preventive strategies, such as skills-based education and school-wide policies to enhance school connection and family implication and involvement. Such policies are effective when: i) they should support normal school functioning and not disrupt it, ii) they are developed with the involvement of all stakeholders (parents, teachers, management, students, etc...), iii) they clearly specify the substances targeted and the locations and/or occasions to which they apply, iv) they apply to everyone in school (not only students), v) they address the infractions of policies through positive sanctions by providing referrals to counselling, treatment and other health-care and psychosocial services rather than punishment and, vi) they are consistently and promptly enforced (including positive reinforcement for compliance). Whereas the main characteristic associated with lack of efficacy of such policies is the inclusion of random drug testing in schools.

In school: school-wide programmes to enhance school attachment

School-wide programmes that improve school connection encourage student engagement,

good bonding, and school dedication. These actions and policies are also universal and apply to everyone. They are often used with other preventive interventions such as skills-based education, school-based substance-use policies, and/or alongside promoting parenting skills and family participation. Keeping children in schools may include (non)-environmental policies or non-manualised programmes.

The evidence shows prevention based on school-wide programmes to enhance school attachment are associated with a positive outcome. These programmes support a positive school ethos and commitment to school, and they support student participation.

In bridging school policies to school ethos, the approach of including, consistently and promptly, a positive reinforcement for policy compliance is very important. Consistently reinforcing positive compliance may even promote a culture of self-referral to the aid services provided in these schools. This is effective in comparison to a strategy such as random drug testing that can result in the expulsion of the students, which is not supported with evidence according to the International Standards. Additionally, this approach can pressure the students to hide the problem (i.e., students can avoid attending these schools). Therefore, these schools would fail to be part of the prevention strategy.

- **Scenario 1:** Students know about the availability of drugs at school, but do not inform the school administration. This scenario falls under the category of substance use related incidents in the school.
- **Scenario 2:** There was a request by a student for an illicit substance, on the school premises, but the request was not fulfilled. The reaction from the school would be different in this scenario. The policy states to refer the student to counselling by the administration, and referral to parents is key.
- **Scenario 3:** A student was present when other students used or supplied a substance on school premises. This is a different scenario, where the child is indirectly involved in the process of other students participating in substance use or transaction. In this case, a counselling referral with parents' attention and withdrawal of privileges could be key in terms of a policy.
- **Scenario 4:** A student entered the school premises or attended a school function in an intoxicated condition. This means the student is personally using the substance. In this case, there will be a different strategy that can be used.

Table 1. Examples of possible substance use incidents and their intervention plans

Level of involvement	Possible response			
	Counselling by administration	Referral to parents	Detention and withdrawal of privileges	Referral to parents, suspension & counselling
1. Knowing about drugs at school but not informing the school administration	✓	✓	–	–
2. Requesting an illicit substance from another student on the school premises (request not fulfilled)	✓	✓	–	–
3. Being present when other students use or supply drugs on the school premises	✓	✓	✓	–
4. Entering the school premises or attending school functions in an intoxicated condition	✓	✓	–	✓

Different substance use scenarios in schools can be managed with different strategies according to the International Standards [7]. Table 1 below shows examples of four different scenarios and suggested strategies to manage them:

Due to the variation in the different scenarios and environmental policies in schools, there is a need to have an explicit school ethos, as well as engagement

and knowledge by all stakeholders involved in the school community. Thus, these stakeholders would know what responses are needed and when and how to act. This includes identifying different substance use strategies in schools (instead of using “one size fits all”). In this way, LEO can give a meaningful contribution if they are called in (though it is not by default the mandate of LEO to do so).

2.3. Importance of the science of prevention

The knowledge of the science of prevention is crucial as it helps shape and correct the modality applied to prevent substance use and reflect on strategies that are important for law enforcement agencies in supporting them in their work with students beyond just addressing drugs in schools.

From the etiological model of vulnerability (as previously described in Figure 1), several ecological layers are influential in addressing vulnerabilities and bolstering the resilience around the child (Figure 3). The LEO can potentially have a role in influencing several of these ecological layers, while availing safety around the child (on the personal level of the child, in school, around school, at the community level, and more). The effectiveness of the LEO role is, however, influenced by several factors that this document aims to outline through the

science of prevention. Reflecting on such science makes the role of law enforcement in prevention more effective.

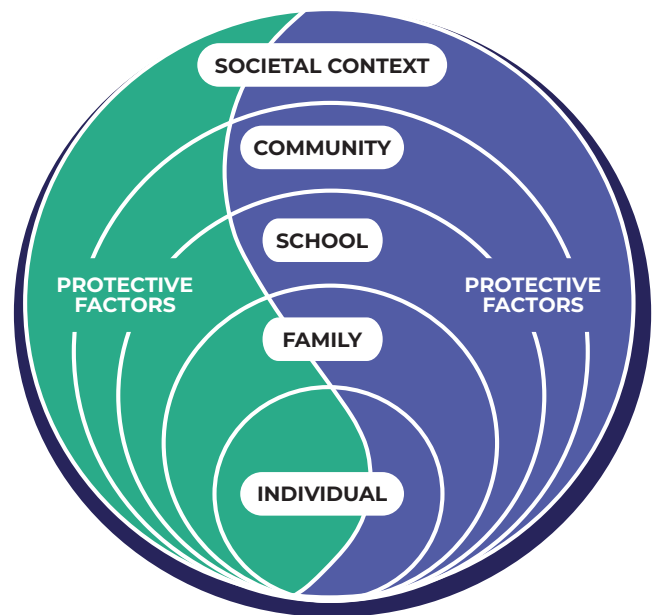
While the science pertaining to LEO-led drug use prevention in schools is still developing, this guidance document relies on an iterative and active engagement process to consolidate all available research that can improve law enforcement officers’ effectiveness in drug prevention in schools. It integrates knowledge from the existing science of prevention, the scientific literature review of the LEO-led work, the law enforcement officers experiences in applying drug prevention programmes in schools and the scientific qualitative evaluation of the impact of law enforcement officers in schools through prevention science experts and educators.

Points for reflection



1. Why is it important for law enforcement agencies and schools to understand the benefit of evidence-based substance use prevention strategies?
2. What can schools and law enforcement agencies do to ensure they are using evidence-based practices in their substance use prevention work inside schools?
3. Why is it important to focus on the school environment rather than on the drug itself when ensuring drug use prevention?
4. Why is it important to focus on the individual rather than on the drug itself when ensuring drug use prevention?
5. What are the “personal characteristics” identified by the vulnerability matrix that may affect drug use?

Figure 3. Categories of factors influencing the likelihood of a young person to engage in substance use



Chapter 3 – Police science

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

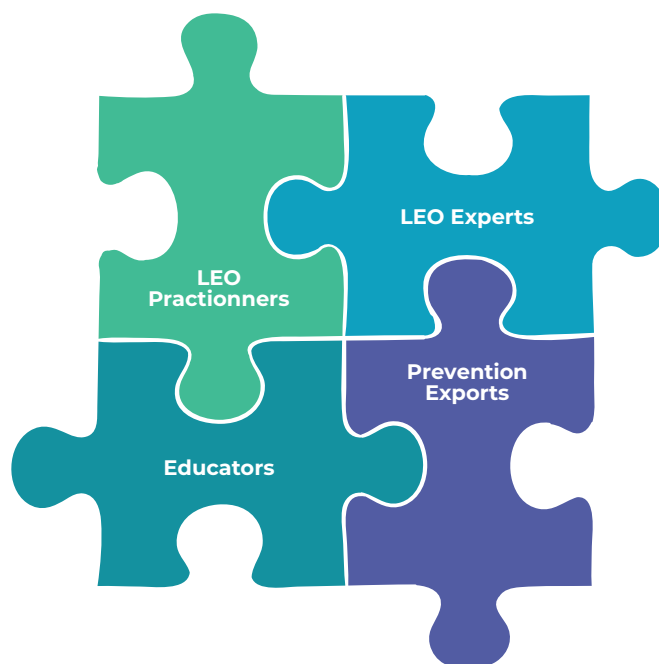
- *understand the importance of a comprehensive public health approach to prevention, which includes the collaboration between law enforcement authorities and communities in tackling crime, school safety and security of students,*
- *apprehend the association between socioeconomic factors and crime as well as health-related outcomes, in a step to a better understanding of their target beneficiaries,*
- *acknowledge the added value that evidence-based strategies bring into law enforcement-led prevention responses in schools.*

3.1 Crime response and control

Law enforcement is considered as both a philosophy (i.e., a way of thinking) and an organisational strategy (i.e., a way to carry out the philosophy) [46,47]. Law enforcement has several mandates, including detecting and preventing crime, and arresting offenders. The LEO works closely with community stakeholders (Figure 4) to solve problems such as substance use [46,47]. Today, creativity and innovation in combatting substance use require a collaboration between the public and the LEO to explore new ways to address the prevention

LEO believe, in general, that their role is broad, and that it should go beyond law enforcement. Their work is complex and relies on the public in different ways. Law enforcement officers need skills, general knowledge, discretion, and initiation of specific programmes for the community, instead of depending only on the general policies and procedures of law enforcement officers, such as preventive patrolling and rapid response [48,49].

Figure 4. Stakeholders must work collaboratively to create effective solutions for substance use prevention



of substance use that go beyond a narrow focus on individual crime incidents. Therefore, when it comes to substance use prevention inside schools, there is a need to develop a creative and effective way to strengthen the collaboration between LEO and the schools.

Law enforcement organisations may take different approaches and strategies to substance use prevention. These will vary based on the needs of different communities. Additionally, the existence of law enforcement within a community does not imply reducing their level of authority or their

primary responsibility in protecting against crime [50]. When it comes to school safety and substance use prevention, a broad-based effort by the entire community is required. This includes educators, prevention professionals, businesses, social and

health services groups, students, parents, law enforcement officers and others. An adoption of a comprehensive approach, focusing on prevention and public health, will help to address school safety and security of students [51].

3.2 Law enforcement and crime prevention (basis of science and principles)

Clinicians, academics, and policymakers have traditionally seen policing and public health as two very different aspects of preventing violence. As a result of this long-standing tradition, which has been reinforced by the differences between the languages of LEO (e.g., poor security, moral responsibility, marginalization, and abuse) and public health experts (e.g., injury, risk factors, and epidemiology), there has been limited collaboration between local law enforcement agencies and public health experts to prevent violence [52]. Collaboration between practitioners and public health experts has also been limited in comparison to other cross-disciplinary fields such as road traffic safety, prisoner health, and prevention of substance use, among many others [52].

However, the safety of communities is a primary priority for both law enforcement and public health experts [52]. Due to the need for enhanced multi-sector efforts to avoid violence, there have been demands for more collaboration across the many disciplines that are tasked with the prevention

of and response to violence. Nevertheless, most public health experts are unaware of the benefits of a relationship between the health sector and law enforcement, as well as how such a partnership may be achieved [52].

Regardless, neither health organizations nor law enforcement have traditionally viewed policing as a component of a public health approach to crime prevention in most areas [52]. This is an essential gap in the current situation. Formal law enforcement collaborations with public health, where they occur, emphasise the separate but complementary responsibilities played by both partners and offer communities a far more complete picture of substance use prevention and risk factors than informal partnerships. These organizations also serve as an effective means of preventing substance use and promoting constructive public policy, as well as ensuring a well-balanced field reaction to violence that is widely accepted by the general public and law enforcement. It is a good option to build and deepen collaborations between law enforcement and public health organizations [52].

3.3 Considering substance use in schools as a public health concern instead of a public safety concern

Policing must shift its mindset and strategy to consider drug use as a public health problem. Both methods assume that substance use is substantially the same as any other public health concern and should be treated as such [45,53]. Law enforcement professionals must get more knowledge on the etiological model associated with substance use, in addition to the long-term effects of substance use on individuals. With such knowledge, law enforcement authorities could possibly intervene both pre-emptively earlier (before the occurrence, or escalation, of the problem) as well as more efficiently. From a policing perspective, this intervention would guarantee that correct alerts are sent to social care organizations and providers, allowing vulnerable victims to get adequate support. By approaching policing through the perspective of public health, officers may consider ways to prevent drug use in schools and give access to resources that will help the people they encounter,

concentrating on counselling and education rather than punishment [7].

Literature examines and discusses the social determinants of crime and health [54–56], where it demonstrates how substance use is linked to the socioeconomic determinants of crime, namely poverty, domestic abuse or violence, housing, cultural and familial influences, educational attainment, characteristics of culture, mental wellness, age, gender, social situations, and environmental conditions.

Given these parallels, evidence suggests that policing should adapt the approach to substance use through the lens of public health, ensuring that all police interventions address the socioeconomic determinants of health and substance use. To be successful, LEO must be given training to improve their awareness of the socioeconomic determinants

of crime (and health) and how these affect their daily job. Accordingly, as a first step, police need a greater grasp of who they are working with daily. That is, police officers must be informed of the backgrounds of the kids with whom they interact and understand how transitioning to an evidence-based training strategy is critical considering the apparent victim-offender overlap.

Furthermore, police departments should educate their officers and new recruits on evidence-based public health methods to prevent substance use in schools, which also urges the use of a public health lens at a systematic level and should be accompanied by thorough assessments of the effectiveness of both the police and the schools.

Points for reflection



1. *How does your perception of drug-related issues (i.e., as a public health concern versus a public safety concern) impact your willingness to address the problem?*
2. *How can you help to change this mindset among the public?*

Chapter 4 – Science of communication

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- *be familiar with the notion of science of communication,*
- *understand the importance of science of communication (SOC) in informing, influencing, and motivating individuals about important health issues, including substance use prevention,*
- *gain an insight on the opportunities drawn from bringing the science of communication into the prevention work of law enforcement authorities, particularly in shaping evidence-based law enforcement-led communication strategies.*

From the description of the etiological vulnerability framework to be addressed, as well as the reflection on effective interventions in such a model of prevention response per the International Standards, it is evident that prevention interventions solely based on information for skill and resilience building are (at best) ineffective. Furthermore, most evidence-based preventive

strategies, as previously highlighted, reflect on specific modalities of communicating skills-based content to the recipient. This namely includes an interactive modality of delivery but is also influenced by the specific skills that the facilitator of the materials at hand needs to be trained on. In other words, communicating the science also is a science by itself.

4.1. Science of communication – an introduction

The Science of Communication (SOC) is described as the art and technique of informing, influencing, and motivating individuals, institutions, and the general public about important health issues [57,58]. The SOC is a hybrid set of communication practices and theories that include multiple fields, including philosophy, psychology, sociology, history, and political science; it is a central subject that integrates multiple areas of research [59]. The SOC includes the utility of evidence-based skills, in terms of media, activities and dialogue in order to produce one or more of the following outcomes: awareness (including familiarity with new aspects of science); effective response; interest in evidence;

opinions for forming or confirming science related attitudes; and understanding of science, its content, processes and social factors [60]. Also, the SOC is considered a process that determines the formal structure of the communication process [59]. In its core, the science of communication involves using language, cognition, and efficacious psychology to make sense of a message that has been received [59].

This applies to all three forms of communications, namely, i) written (e.g. articles, books, emails, and newsletters), ii) oral (e.g. lectures and presentations), and iii) visual (e.g. poster sessions and lectures).

4.2. Science of communication and public health prevention

The effectiveness of media-based campaigns to prevent substance use has been questioned [61] due to several reasons [7]. However, it should be noted that it is not the media itself that has failed as a tool of prevention; rather, it is the messages that have been delivered by the media which have failed [7,61]. Health communication is an important tool used by healthcare professionals to improve both individual and public health. It involves the study and use of communication strategies to inform and influence personal and population decisions that improve health [62]. The SOC helps us to understand how science-based principles of message design can influence the success of public health communications; and

SOC focuses on the decisions about what to say (content), how to say it (execution), and how the decisions influence the persuasiveness of the message. Thus, SOC is about assessing strategies by which health messages can be adapted to the unique information needs of targeted audiences [63]. The SOC is used in public health to improve health related public norms and behaviours [64]. An effective public health communication is an indispensable component of robust public health prevention interventions. Ineffective communication strategies, poor execution, and an inability to counter misconceptions are often factors in the failure of public health communication [64].

4.3. Science of communication and law enforcement

It is tricky for anyone to effectively connect with large sections of the community in order to increase their knowledge of a subject or influence their behaviour. Due to the complexity of the issues and the diversity of their audience, it is particularly challenging for law enforcement agencies. Never before has it been more important for the police to communicate effectively with the public [65]. The communication strategy of LEO has changed over time. Today, LEO need to be strategic in how they craft their prevention messages in schools [65]. In the field of public health, the SOC refers to a communication framework that considers the behavioural and cognitive principles that drive selection of populations, messages, and message delivery methods and is informed by relevant behavioural and communication theories and formative research [66].

LEO senior management, school leaders and parents should work together to establish the criteria for the identification of the best school-based LEO facilitators for substance use prevention related activities. The literature recommends the following qualities for LEO prevention activities in schools [7,67]: having a positive attitude, demonstration of excellent communication and interpersonal skills, willingness to develop partnerships with students, parents, families, community organizations and school administrators, understanding of evidence-based substance use prevention in schools, understanding of child development and psychology, and understanding the role of evidence-based substance use prevention.

4.4. Implementing evidence-based communication strategies

The communication of substance use prevention information requires using evidence-based strategies that are proven to be effective [7,68]. The communication needs to be based on established theories of persuasion (not whim or common sense) and should be tailored to the receiving audience. Additionally, LEO should use evidence-based communication skills with fidelity in order to increase the likelihood that the intervention has its intended effect of reducing substance use [68].

Examples of what works and what does not work in communicating substance use prevention should be modelled [7,69]. Effective and successful health communication strategies need to include the following characteristics: they should be accessible, actional, credible and trusted, relevant, timely and understandable [6,7,70]. The strategy of communication necessitates that the content

be clear, logical, factual (i.e. science based), use correct grammar, use correct sentence structure, avoid speculations and any fear arousal related messages [7].

When presenting to the audience, SOC suggests the following strategies: i) speak to your audience before starting your presentation, ii) keep eye contact with your audience (and not on your presentation), iii) avoid giving random lectures, in an inconsistent way, and iv) avoid using scare tactics (scientific evidence shows that fear arousal can lead the audience to believe that such an approach is being exaggerated or is not related to the truth, which can lead the children to ignore the meaning of the message) [7]. Also, valuably, communication strategies that are part of larger efforts where other agents of the prevention system (including school and the community) are implicated are more effective.

Points for reflection



1. *How do you describe the science of communication?*
2. *What characteristics are important to have when you recruit a LEO for substance use prevention related activities in schools?*

Chapter 5 – Role of law enforcement in the community

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- *acknowledge the positive role of law enforcement officers when engaging with communities,*
- *learn about the role and importance of a change in mindset between the different counterparts of the response towards inclusive and collaborative prevention responses (involving law enforcement, communities and other stakeholders),*
- *learn more about the dynamics between law enforcement and schools and their common goal of fostering a safe and healthy environment for students to grow and develop within school settings,*
- *be familiar with the considerations law enforcement officers need to account for prior to their potential involvement in prevention responses within school settings.*

5.1. Law enforcement officers and community

Law enforcement in the community is founded on the idea that more community engagement results in increased safety, social, health standards, as well as a decrease in crime [71]. This is accomplished by integrating police into the community, enhancing their legitimacy through law enforcement, and improving their public services. Law enforcement is a departure from standard policing techniques, which focus primarily on rapid reaction as a means of preventing crime. To integrate an effective law enforcement presence into a community, a shift in perception is necessary towards policing as a 'police service' rather than a 'police force'. In other words, policing should be viewed as an exercise of 'power in collaboration with' communities, rather than as an exercise of 'power over' communities.

Since law enforcement, particularly under the paradigm discussed in these guidelines, may entail considerable changes to established police norms and responsibilities, implementing such a change can be a significant project for a police agency. Along with modifying organizational structure, culture, and methods of operation, police organizations may meet resistance to these changes and a lack of understanding of the new ideology among all ranks of the police. As such, the transition to a more proactive, collaborative, and community-based approach will require deliberate and intentional leadership on the part of police senior management, as well as defined protocols for strategic planning and implementation [71].

Police leaders could consider introducing and deploying specialized police units largely composed of community police officers assigned to fulfil particular law enforcement functions within the community. This decision should be based on

the circumstances and resources available in the specific region to be policed. According to research, law enforcement is more successful when a specialized unit is assigned to police a community/ neighbourhood [71]. Law enforcement community police officers assigned to specific locations can serve as a source for information and a regular point of contact for families and communities for the execution of certain community programmes. Additionally, these police officers can serve as liaisons with schools.

Law enforcement community officers should maintain a visible, engaged presence in the community on a regular basis. To do this, they must be separate from daily emergency response patrols. However, emergency response teams should also execute visible, engaging law enforcement tasks when not immediately needed to react to other requests for help. Additionally, there needs to be the avoidance of (mis)perceptions that law enforcement is a distinct unit with little in common with 'real' law enforcement (i.e., emergency response units), especially when police officers are required to coordinate community demands and priorities with divergent tactical requirements from other (investigative) units. Such misconceptions would greatly impede the department-wide incorporation of this concept. Thus, it is critical that police personnel – whether assigned to patrol, law enforcement, investigations, or other specialized units – meet regularly and are briefed together, and ensure that information is sent between different shifts via notebooks. Developing solid relationships between community police officers and other officers is a significant advantage in delivering successful law enforcement [71].

Community police officers work directly with locals to promote better communities and prevent crime. Middle-ranking officials are accountable for the overall implementation of the law enforcement strategy and will oversee high-level involvement with external agencies and communities to address systemic issues that cannot be resolved locally.

Along with these functions, a dedicated community police team should include individuals from other specialist units (e.g., drug trafficking, severe crime, and highway policing) who are assigned particular law enforcement responsibilities when not assigned to unit-specific initiatives [71].

5.2. Law enforcement officers and mindset change

Effective law enforcement includes a change of mindset on the part of both the government and the police service. Without the political and financial support of the government, enforcing the law might be challenging. If this transformation is successfully implemented from the top to the bottom of an organization, law enforcement can become the default way of thinking, being, and policing.

However, unwavering dedication from the police service, and steadfastness from its leadership, will be required to reinforce and advance personal and community safety in all neighbourhoods [71]. The appropriate use of authority is one of the most critical abilities a police officer must possess. 'Power with' rather than 'power over' should be the default perspective. 'Power with' refers to the ability to accomplish goals and tasks through collaboration without resorting to compulsion or control. The goal is to police with the agreement, cooperation, and support of communities [72].

Evidence-based law enforcement/crime prevention

All branches of the police must adopt the philosophy of law enforcement. They must be committed to

using a crime-prevention, problem-solving, and cooperative approach in their interactions with the public, government agencies, and other police units to be successful and long-lasting in their objectives of crime prevention and public safety [73,74].

In contrast with traditional (reactive) enforcement actions, a problem-solving approach to crime prevention and public safety is a critical component of law enforcement. An essential factor of this strategy is the systematic (and, ideally, computer-aided) analysis of social problems, which involves focusing on recurring patterns of incidents rather than isolated incidents, treating them as a group of problems, and determining the underlying causes of crime and disorder.

Conducting victimization surveys, mapping hot spots of criminal activity, or collaborating with social and health care establishments or schools are all examples of acquiring analytical information. Due to the fact that this information can only be acquired from members of the community, close and trusted collaboration is required [71,75,76].

5.3. Law enforcement officers and schools

LEO and school personnel missions and objectives can be different. Yet, they tend to have common grounds, which are considered significant and important:

- I. They both have the responsibility for the safety and well-being of the students. Schools also carry an important responsibility towards the students, where they take on some of the functions and caregiving roles of the parents (known as *in loco parentis*). When it comes to LEO working within schools, they are considered to have an intuitive extension into the school setting of their responsibilities for public safety in the broader community.
- II. Schools, complemented by LEO, teach students about their rights and responsibilities in an effort to reinforce education for behaviour associated with good citizenship.

Law enforcement officers inside schools

Historically, the mission of law enforcement was to prevent crime and maintain order in the neighbourhoods through communication with the community members. In instances where law enforcement became integrated with their neighbourhoods, they generally received more support from the citizens, and they were often viewed as effective in preventing crime. Eventually, the role of community police developed into one of controlling crime through law enforcement, therefore, the community problems were viewed as "social work" and their name became "law enforcement officers" [48,77]. The performance assessment of LEO started to be measured in terms of response time, random patrol availability, arrests and adherence to rules. This resulted in community members beginning to perceive LEO as professional crime fighters interested in punishing criminals rather than as members of the community working together to create a safer environment [48].

When LEO focus on crime control strategies inside schools, it tends to be considered as a non-working modality. This is particularly true when contrasted to the paradigm of addressing substance use prevention as discussed per the science described in this guiding document.

However, the below reflections need to be considered when LEO are implicated in working on prevention in schools:

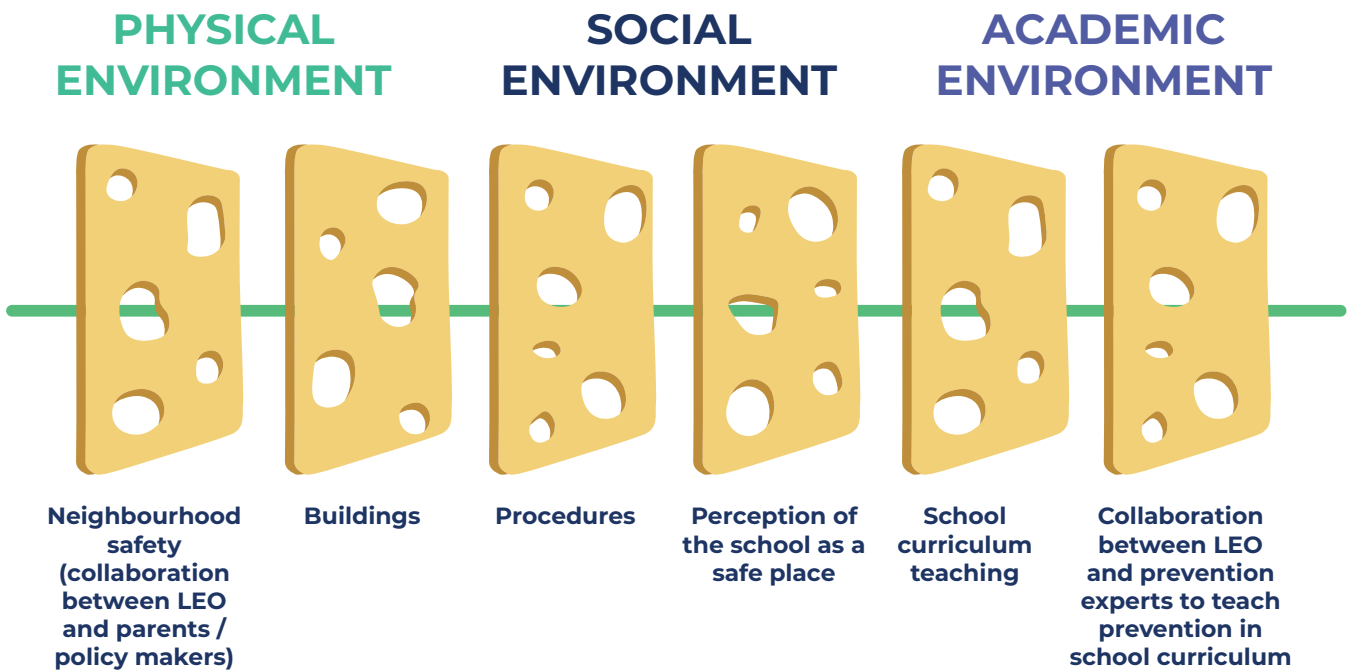
I. Problem oriented LEO: this approach deals with crime and substance use through an analytical process. The underlying problems that lead to crime and substance use will be analysed to develop the best strategies for addressing these issues. The work will be done together with the different stakeholders in the community (e.g. schools) through a collaborative problem-solving partnership modality [76].

II. A designated LEO for the school: the schools are part of the community. Therefore, the police-related organisations will need to invest in creating and developing a new line of LEO that operate as a direct link between the police and the schools. Additionally, to allow the LEO to focus on their work in the schools, they will need to be freed from the isolation caused in patrol cars and the demands of the police radio. This will allow them to maintain daily, direct, face-to-face contact with the schools they serve, in a clearly defined geographical area (known as the beat area) [46,47].

The LEO – school partnership includes three different perspectives (Figure 5):

5.3. Law enforcement officers and schools

Figure 5. The Swiss cheese conceptual framework for the combined impact of law enforcement officers working inside and outside of schools on the reduction of substance use inside schools



Points for reflection

1. How can LEO develop positive relationships with the students and staff of schools?
2. What are the potential barriers that could result in a negative perception of LEO in schools?



Chapter 6 – The potential role of the school – Law enforcement officer partnership

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- *be familiar with the target groups in the partnership between schools and law enforcement officers,*
- *learn about the importance of multi-stakeholder partnerships (including law enforcement) in advancing public health practices and addressing vulnerability factors in schools and communities.*

School environments are potential targets for drug traffickers [79]. Exacerbating this issue, school students are at a critical age of initiation of risky behaviours (including substance use). Moreover, early substance use is associated with a higher likelihood of escalating into substance use disorders. Nevertheless, prevention of substance use is a result of un- or poorly addressed vulnerabilities that require multi-sectoral support. Therefore, there is a need to have a multi-stakeholder partnership, including

schools, parents, social and health services, and LEO given that they all play a valuable role in mitigating substance use in schools.

LEO can play a role in supporting the students and other stakeholders throughout a comprehensive process (Table 2). LEO are increasingly needed to support implementing public health practices in communities and schools [80].

Table 2. Target groups in the partnership between schools and law enforcement officers

Target segment	Target group	Law enforcement officers' role
Law enforcement officers' organisational support	Law enforcement officers' leadership/management	Critical role in establishing a framework for partnership.
School's organisational support	School's principals	Support for principals in school building operations, including the implementation of students' conduct policies and procedures.
Inside classrooms	Instructional team	Instructors tend to know students on an individual level. Law enforcement officers support to them is critical for the partnership success.
High-risk students	Any specialists working in schools (e.g., school nurse, social worker, school psychologist, guidance counsellor)	The specialists generally support all students, but they tend to work mainly with high-risk students. Therefore, law enforcement officers need to consider them as key partners when developing intervention strategies for individual students.
Students	Students	Build their capacity with skills-related problem analysis and developing solutions.
Households	Parents	Their perspective on the partnership is very important. Law enforcement officers need to keep building a good relationship with them.
School and household environments	Businesses in the same communities as schools, non-governmental organisations, and Faith-based organisations	Usually, they have a high level of investment in schools. The law enforcement officers partnership with them can lead to community support.

Adapted from [80,81]

These are some potential roles that can provide a basis that can be further discussed and refined through such multi-stakeholder partnerships.

Chapter 7 – Law enforcement officers’ led prevention practices within school settings: what works and what does not work

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- *learn about and be familiar with the factors affecting the effectiveness of LEO-led prevention in schools,*
- *understand the elements to be considered and challenges surrounding the process of developing and implementing manualised prevention programmes,*
- *grasp the role of LEO in shaping environmental policies to create a safe and healthy environment for students within and around their schools.*

7.1. Defining relevant outcomes

The ultimate goal of this document is to provide guidance on the prevention of substance use inside the school’s physical environment with the cooperation of LEO. The review of existing evidence indicates that for manualised programmes, the results of LEO implementation of school-based prevention programmes have been inconsistent when it comes to substance use prevention. Furthermore, there are other factors to account

for that are directly related to the fact that the implementors are LEO. There are defining factors that affect the engagement of LEO, and this would be related to what kind of programme is considered (environmental vs. manualised) (additional information about the characteristics of the LEO facilitators were explained under the chapter entitled “Science of Communication”).

7.2. Defining factors affecting the engagement and success of law enforcement officers in schools

Factors affecting the engagement of LEO in schools are:

- The role of LEO in the prevention field: The field of law enforcement is based mainly on rapid response services, and most of the time it is dedicated to managing immediate harms. Yet, LEO can play an important role in the prevention field due to their engagement with all segments in the community and their knowledge of the nature of crime and its causes [82].
- Personal engagement: This is done on a person-to-person basis with individual LEO. It helps further clarify the intent of the programme and the purpose of the content. It is helpful to ensure that there is a core group of people who understand the purpose of the programme and the science behind it (i.e., academicians and LEO).
- Type of programme: Environmental policy work is key (not only beyond the physical environment of a school but also within the school). It is also important to consider age-related variables, which in turn expand the level of opportunity and affinity of engagement of LEO.
- Experience of LEO: A wide range of experience with law enforcement exists. The degree to which LEO have access to schools, and how much the LEO are allowed to be engaged within the school environment are factors to consider as their access to schools is not universal or uniform in all scenarios.
- Perception of LEO by the community and the schools: The perception of the level of crime in a community tends to significantly influence opinion of the LEO held by the community. Yet, when community members have informal contact with LEO, they tend to have better perceptions of them (in comparison with the community members with formal contacts) [83].

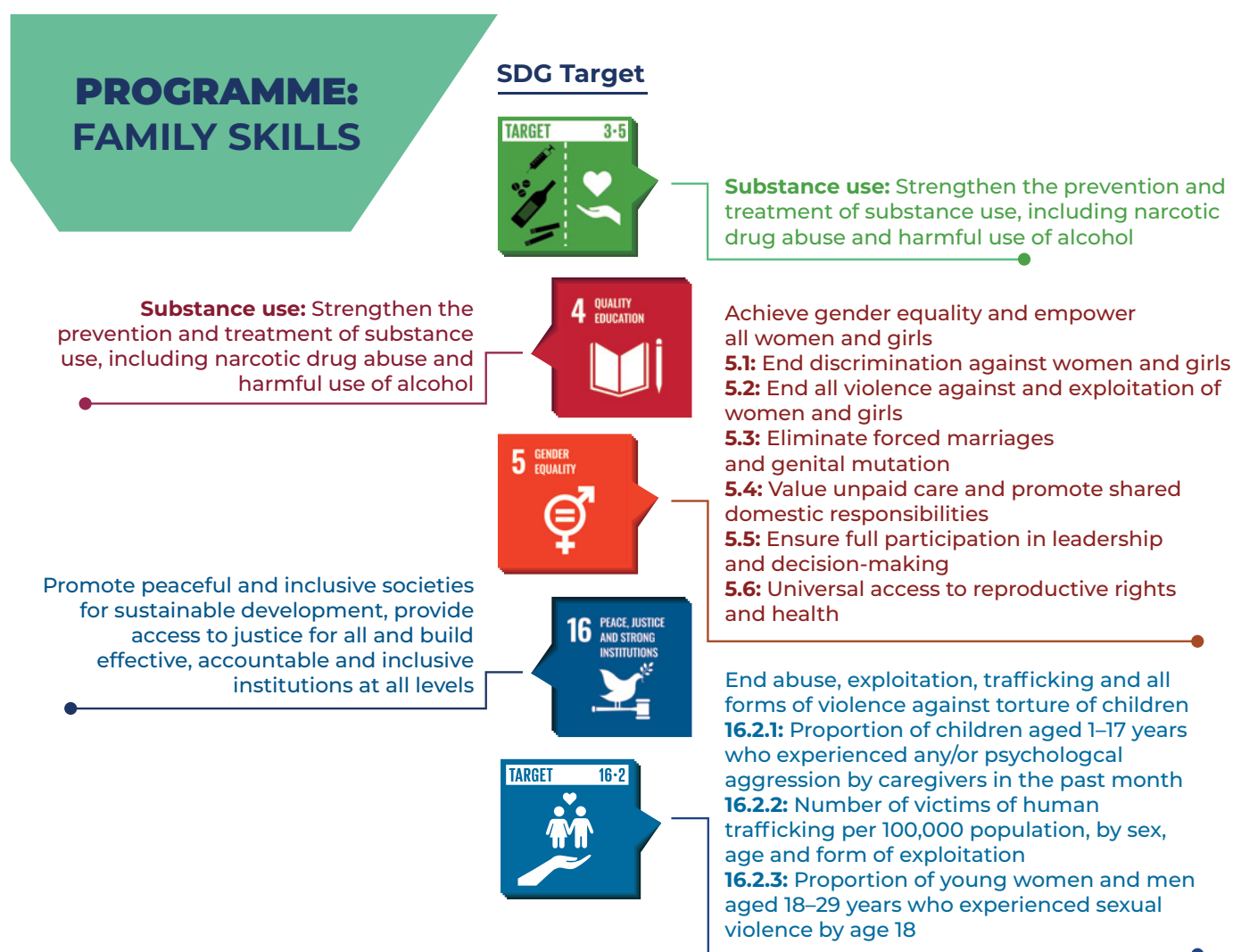
7.3. Law enforcement and manualised packages and programmes

Several evidence-based programmes (also known as manualised programmes) are available to train parents and children to prevent substance use and violence (including gang violence, in certain contexts/regions of the world). Such programmes can support at least three SDGs: 3.5, 16 and 16.2, when they are appropriately applied. This is particularly important during the period of “building

and how it aligns to multiple SDGs is provided under Figure 6.

Nevertheless, as previously mentioned, the scoping literature review does not reflect any LEO-led package with evidence of impact on substance use prevention in schools. The majority of the LEO-led packages, as reflected in

Figure 6. SDGs that can be best addressed by applying the science of prevention to preventing substance use



up better” following the COVID-19 pandemic, when the attention of member states is likely to be channelled towards the economic recovery of their countries. Therefore, engagement in psychosocial and emotional learning programmes is highly needed and can lead to positive future outcomes. An example of an evidence-based prevention strategy

the literature review, were not aligned with the etiological model or the scientific orientation of the International Standards. Moreover, there is not enough evidence of positive effects even if LEO are often well-trained and might be more motivated than teachers when they deliver interventions that are aligned to the International Standards.

This indicated the need for further exploration of future potential manualised programmes for such a workforce, noting that:

- Integrating prevention, within law enforcement prevention programmes, could be challenging.
- Very specific and concrete guidance is not always welcomed or translated into action by LEO or by the recipient audience of the information delivered by LEO. Engaging, with all stakeholders, in the decision process is key.
- In manualised programmes, careful consideration is required regarding recommendations, suggestions, and considerations of which programmes to engage in (per the International Standards). Additionally, even if the programme is effective

in one country, many factors might impede the transferability of these findings to others (many process-related variables are involved).

- It is important to coordinate with LEO about what is available, good, acceptable, and feasible within the community. It would be beneficial for LEO to create a technical document that is transparent and highlights their goals, and then to allow members of the community to react and provide feedback so that LEO can assess how to implement the feedback.
- LEO working inside schools should not be alone. All the implemented programmes should be done in partnership with other stakeholders so that this becomes an open space to all engaged parties inside the school (e.g., teachers, students, psychologists, parents).

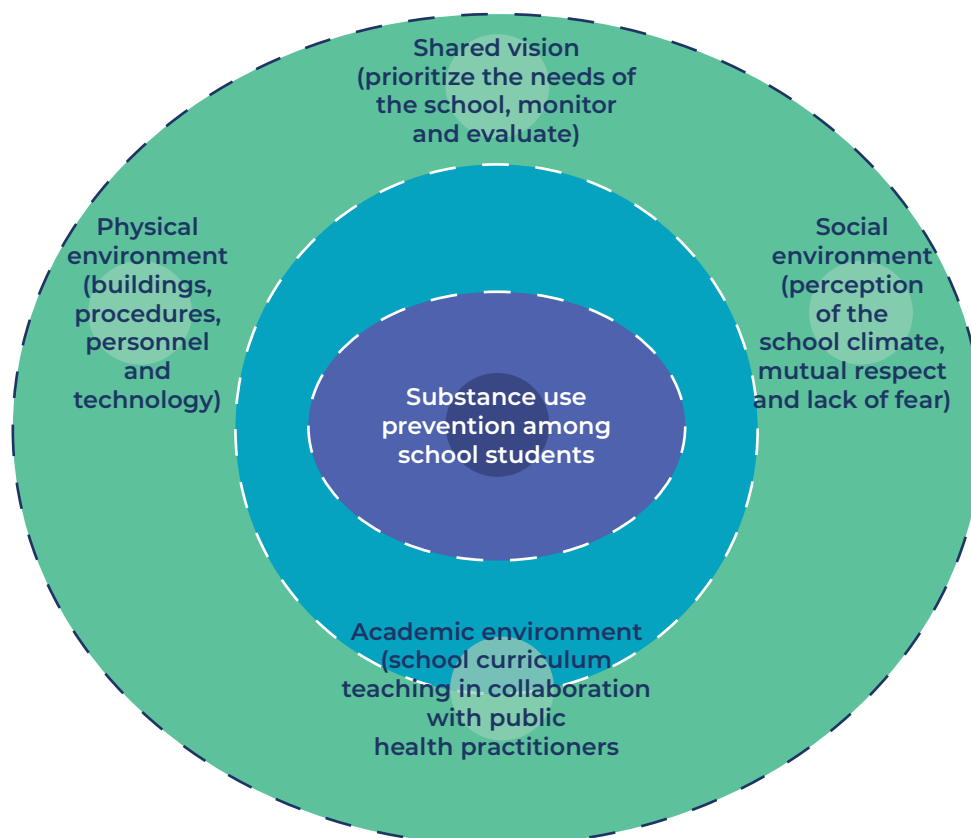
7.4. Law enforcement and environmental policies

Environmental policies are important and influential (not only outside schools but also inside the schools). Figure 7 describes the three different types of environments:

1. The physical environment of the school: this includes buildings, grounds, staff, procedures, and technology. LEO are trained to recognize and identify risk factors in the physical environment of the school that may lead to crime. When LEO and educators establish a partnership, they can plan together to prevent crime.
2. The social environment of the school: this includes the school climate, (i.e., a feeling of mutual respect), trust, and no feeling of intimidation or fear.

3. The academic environment of the school: this includes the students' curriculum and students' and teachers' expectations for high achievement. In collaboration with public health practitioners, the LEO collaborate with the school on teaching material related to empowering students, their rights, law-related topics, peer mediation and conflict mediation programmes, substance use and violence prevention organisations, community service programmes, and disruptive behavioural decline [51,78].

Figure 7. Conceptual framework of the collaborative work between the different environments around substance use prevention inside schools



LEOs have a broad network that includes access to data and information about the crime situation outside the physical environment of schools. The LEO can focus on creating a safe environment in and around the school, free from crime, fear, or risk factors for substance use. They also have the mandate to issue policies that can limit the exposure of students to substances in the physical environment of the schools (e.g., to criminalise the sale of alcohol up to a certain radius around the school). The focus on the environment relates to safety within the school yard. There is a need to further study factors that affect school yard safety, although there is difficulty in designing studies pertaining to these factors.

The definitions of environmental strategies need to be properly articulated. The concept of environmental strategies focuses on reducing certain elements in the environment that contribute to substance use. This includes, as an example, norms of tolerance of substance use and any policies that might be enabling substance use.

The existing etiological model described by the International Standards reflects a clear and important role that LEOs can play in the context of environmental prevention (especially when their role is aligned with the science of prevention) for having a positive effect on prevention in schools.

Points for reflection

1. *To what extent will the perception of the LEO by the students affect their successful role in drug use prevention?*
2. *What role can the individual (i.e., parents, children, teachers, school administrators) play in ensuring a smooth transition of LEO into schools?*
3. *What is the best strategy of prevention that could be delivered by LEO?*



Chapter 8 – Importance of epidemiology and evaluation

Expected learning outcome from this chapter



After the completion of this chapter, law enforcement officers will:

- *learn about the importance and significance of the knowledge about the epidemiological situation amongst LEO implicated in prevention,*
- *understand the role of data-driven evaluation in ensuring and documenting the effectiveness and fidelity of implementation of LEO-led prevention programmes.*

8.1. Knowledge of the epidemiological situation

It is highly important that LEO engaged in substance prevention related work have the knowledge about the epidemiology of substance use in the context of their work. This knowledge is to give them a general context of the epidemiological situation they are implicated in, the aim is not to share this information with the children in schools. Such epidemiological knowledge, further to the etiological formation on the science of prevention, would allow the LEO to better prioritize the vulnerabilities, age groups, risk and protective factors to be addressed in their prevention efforts.

The Lisbon consensus indicators [84] could provide the basis of the minimum set of indicators needed to get a general grasp of the situation:

- i. Main substances that are used among the general population (age 18-64 years) (prevalence and incidence)
- ii. Main substances used among the youth population (age 18-25 years) (prevalence and incidence)
- iii. Substance use among special or vulnerable populations (this indicator depends on the availability of any sub-populations in the contexts of the LEO; identify these special/vulnerable populations, as well as estimate the prevalence of substance use among them)
- iv. High-risk substance use consumption (e.g. injecting drug users)
- v. Services utilization (e.g. at drug treatment centres, self-help or other services for substance use)
- vi. Co-morbidity associated with substance use (when cases are directly or proportionally related to substance use, including HIV and HCV infection rates among drug injectors)
- vii. Substance use emergency room visits
- viii. Psychiatric morbidity directly attributed to substance use (in case it is possible to know or in case there is information about any existing diagnostic information to identify psychiatric morbidity related to substance use; however, sometimes such a level of detail may not be available all the time)
- ix. Substance use related mortality (deaths directly or proportionally related to substance use)
- x. Social exclusion and disadvantage

8.2 Science of evaluation

The evaluation is important for the completion and success of programmes related to substance use prevention [7,85]. There is a growing need to ensure that science of evaluation is implemented for the success of any intervention for substance use prevention [85]. The science of evaluation for a prevention intervention programme includes a

systematic collection, analysis and interpretation of the information about the impact of the intervention [86]. The science of evaluation clarifies how to differentiate between a useful and an ineffective substance use prevention program [7]. Yet, there is a limited number of substance use prevention programmes that are evaluated, due to several

reasons [7], such as the belief that self-assessment is enough [87]. The concept of monitoring and evaluation can be helpful within the substance use prevention programmes, since:

- i. it supports LEO to keep track of what their respective substance use prevention activities are. This helps them to adjust during the process of the intervention, and

- ii. it provides evidence regarding the impact of the LEO substance use prevention programmes on children in schools.

The utility of monitoring and evaluation of substance use prevention can help LEO to assess the fidelity of the project, through the evaluation of the outcome/effects of the LEO interventions, as well as the process/baseline evaluation [7,87].

8.3. Potential challenges against the science of evaluation

The science of evaluation may face potential challenges or resistance from the implementers of the respective interventions. Such resistance might be due to any of the following arguments:

- i. the number of published studies tend to be too low to be able to identify the component(s) that is/are really necessary for the intervention or policy to be efficacious or effective (known as the “active ingredients”) [7],
- ii. environmental strategies modality of evaluations are challenging as compared to manualised packages,
- iii. as in different fields of sciences (e.g. medical, social and behavioural sciences), there is the so-called “publication bias”. This is a problem in prevention research, because studies reporting new positive findings are more likely to be published than are studies reporting negative findings. This means that the analysis risks overestimating the efficacy and the effectiveness of substance use prevention interventions and policies.

Therefore, there is a great need to support and nurture research in the field of substance use prevention globally. It is critical to support prevention research efforts in low- and middle-income

countries, but national prevention systems in all countries should invest significantly in the rigorous evaluation of their programmes and policies in order to contribute to the global knowledge base. Yet, in the meantime, the LEO do not need to wait for the gaps to be filled before implementing prevention initiatives, because the gaps in the science should make us cautious but not deter us from action. All actions nevertheless need to be guided by the available science, including as described by the International Standards.

A prevention approach that has been demonstrated to work in one area of the world is probably a better candidate for success than one that is created locally on the basis of goodwill and guesswork alone. Likewise, approaches that have already failed or resulted in adverse effects in some countries are prime candidates for failure elsewhere. Prevention practitioners, policymakers and community members involved in drug prevention have a responsibility to take such lessons into consideration [7].

The culture of evaluation, further to the culture of prevention science, is core in improving the effectiveness of prevention interventions applied by LEO.

Points for reflection

1. *How do you usually reflect about the effect of your work in substance use prevention?*
2. *How do you envision implementing monitoring and evaluation for your current and future substance use prevention related activities?*



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Appendix A

The published paper of the scoping review entitled "The Role of Law Enforcement Officers/Police in Drug Prevention within Educational Settings-Study Protocol for the Development of a Guiding Document Based on Experts' Opinions" Available as open access: <https://pubmed.ncbi.nlm.nih.gov/33807797/>

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